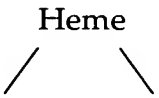
AMENDMENTS TO THE CLAIMS

Please amend the claims as shown:

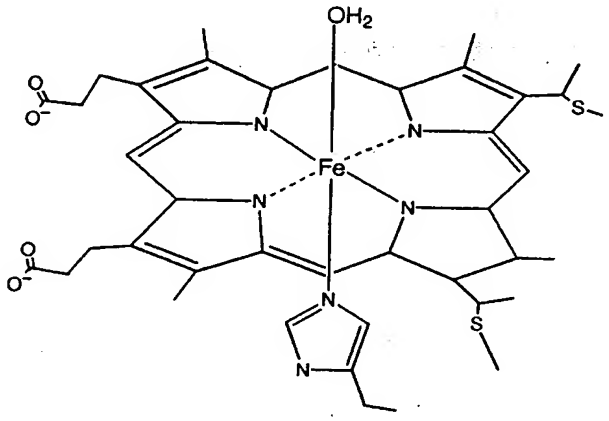
1. (currently amended) A heme peptide represented by the following formula I:



(I)

where A1 is a hydrogen atom or a peptide chain consisting of 1 to 20 amino acid residues;

A2 is a hydroxyl group or a peptide chain consisting of 1 to 50 amino acid residues; the heme is a heme nucleus represented by the following formula:



(II)

X1 and X2 each independently represent any amino acid residue; and
X3 is His, Lys or Arg (see SEQ ID NO: 11 for complete embodiment).

2. (currently amended) The heme peptide according to claim 1, wherein X1 and X2 in formula I each independently represent an amino acid residue selected from

the group consisting of Ala, Gln, Lys, Arg and Val (see SEQ ID NO: 12 for complete embodiment).

3. (currently amended) The heme peptide according to claim 1, wherein X1 is Ala; X 2 is Gln or Ala; and X3 is His in formula I (see SEQ ID NO: 13 for complete embodiment).

4. (currently amended) The heme peptide according to claim 1, wherein

A1 is a hydrogen atom or a peptide chain having an amino acid sequence of Val-Gln-Lys-;

A2 is a peptide chain having an amino acid sequence of -Thr-Val-Glu-Lys (SEQ ID NO: 14) or -Thr-Val-Glu-Lys-Gly-Gly-Lys-His-Lys-Thr-Gly-Pro-Asn-Leu (SEQ ID NO: 18);

X1 is Ala; X2 is Gln; and X3 is His in formula I (see SEQ ID NO: 5 for complete embodiment).

5. (currently amended) The heme peptide according to claim 1, wherein

A1 is a peptide chain having an amino acid sequence of Phe-Ser-Ala-Asn- (SEQ ID NO: 15);

A2 is a peptide chain having an amino acid sequence of -Ala-Gly-Gly-Asn-Asn-Ala (SEQ ID NO: 16);

X1 is Ala; X2 is Ala; and X3 is His in formula I (see SEQ ID NO: 3 for complete embodiment).

6. (currently amended) The heme peptide according to claim 1, wherein ~~except that~~

~~A1 is a hydrogen atom;~~

~~A2 is a peptide chain having an amino acid sequence of -Thr-Val-Glu;~~

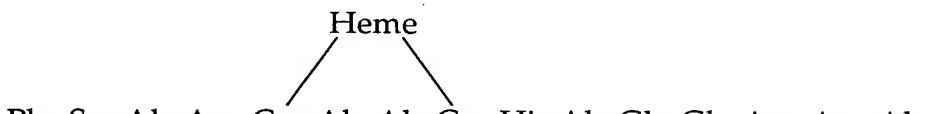
~~X1 is Ala; X2 is Glu; and X3 is His, and~~

A1 is a hydrogen atom or a peptide chain having an amino acid sequence of Val-Glu-Lys-;

A2 is a peptide chain having an amino acid sequence of -Thr-Val-Glu;

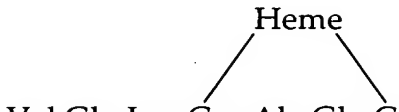
X1 is Ala; X2 is Glu; and X3 is His in formula I (see SEQ ID NO: 17 for complete embodiment).

7. (currently amended) The heme peptide according to claim 1, wherein the heme peptide is selected from the group consisting of heme peptides represented by the following formulas:



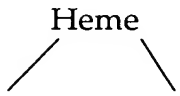
(SEQ ID NO: 3)

(SEQ ID NO: 4)



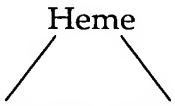
Val Gln Lys Cys Ala Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu

(SEQ ID NO: 5)



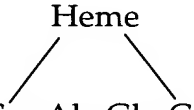
Gly Asp Val Glu Lys Gly Lys Lys Ile Phe Val Gln Lys Cys Ala Gln Cys His Thr Val Glu Lys Gly Gly Lys His Lys Thr Gly Pro Asn Leu His Gly Leu Phe Gly Arg Lys Thr Gly Gln Ala Pro Gly Phe Thr Tyr Thr Asp Ala Asn Lys Asn Lys Gly Ile Thr Trp Lys Glu Glu Thr Leu Met

(SEQ ID NO: 6)



Val Phe Ser Ala Asn Cys Ala Ala Cys His Ala Gly Gly Asn Asn Ala Ile Met Pro Asp Lys

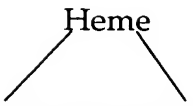
(SEQ ID NO: 8)



Lys Gly Lys Lys Ile Phe Val Gln Lys Cys Ala Gln Cys His Thr Val Glu

(SEQ ID NO: 9)

and



Val Phe Ser Ala Asn Cys Ala Ala Cys His Ala Gly Gly Asn Asn Ala Ile
Met Pro Asp Lys Thr Leu Lys Lys Asp Val Leu Glu

(SEQ ID NO: 10)

where the heme means the heme defined in formula I.

8. (original) A method of producing the heme peptide according to claim 1, comprising digesting cytochrome *c* with a restriction enzyme and purifying the resultant digest by gel filtration chromatography.

9. (original) The method according to claim 8, wherein the restriction enzyme is selected from the group consisting of thermolysin, trypsin, chymotrypsin, *Achromabacter* protease I and *Staphylococcus aureus* V8 protease.

10. (original) A method of producing the heme peptide according to claim 2, comprising digesting cytochrome *c* with a restriction enzyme and purifying the resultant digest by gel filtration chromatography.

11. (original) The method according to claim 10, wherein the restriction enzyme is selected from the group consisting of thermolysin, trypsin, chymotrypsin, *Achromobacter* protease I and *Staphylococcus aureus* V8 protease.

12. (original) A method of producing the heme peptide according to claim 3, comprising digesting cytochrome *c* with a restriction enzyme and purifying the resultant digest by gel filtration chromatography.

13. (original) The method according to claim 12, wherein the restriction enzyme is selected from the group consisting of thermolysin, trypsin, chymotrypsin, *Achromobacter* protease I and *Staphylococcus aureus* V8 protease.

14. (original) A method of producing the heme peptide according to claim 4, comprising digesting cytochrome *c* with a restriction enzyme and purifying the resultant digest by gel filtration chromatography.

15. (original) The method according to claim 14, wherein the restriction enzyme is selected from the group consisting of thermolysin, trypsin, chymotrypsin, *Achromobacter* protease I and *Staphylococcus aureus* V8 protease.

16. (original) A method of producing the heme peptide according to claim 5, comprising digesting cytochrome *c* with a restriction enzyme and purifying the resultant digest by gel filtration chromatography.

17. (original) The method according to claim 16, wherein the restriction enzyme is selected from the group consisting of thermolysin, trypsin, chymotrypsin, *Achromobacter* protease I and *Staphylococcus aureus* V8 protease.

18. (original) An NO scavenger comprising the heme peptide according to claim 1.

19. (original) An NO scavenger comprising the heme peptide according to claim 2.

20. (original) An NO scavenger comprising the heme peptide according to claim 3.

21. (original) An NO scavenger comprising the heme peptide according to claim 4.

22. (original) An NO scavenger comprising the heme peptide according to claim 5.